

Solving America's Innovation Problem

November 30, 2012



What We Do

Change the Equation (CTEq) is a nonprofit, nonpartisan, CEO-led initiative that is mobilizing the business community to improve the quality of science, technology, engineering and mathematics (STEM) learning in the United States.

Since its launch in September 2010, CTEq's coalition of members strives to sustain a national movement to improve PreK-12 STEM learning by leveraging and expanding its work focusing on three goals:

- **Improving Philanthropy**—Increase the impact of corporate philanthropy by emphasizing high quality, scalable programs.
- **Inspiring Youth**—Capture the imagination of young people, giving them a solid foundation in STEM and insight into the unlimited postsecondary and career options.
- **Advocating for Change**—Promote proven state policies and research-based practices that enhance student mastery of and interest in STEM disciplines.



1

Who We Are

3M
 A123 Systems
 Accenture*
 Advanced Micro Devices
 The Aerospace Corporation
 Agilent Technologies
 Alcoa
 Amgen
 Archer Daniels Midland
 AT & T
 Autodesk
 BAE Systems
 Battelle
 Bayer
 Bechtel
 Boeing
 Booz Allen Hamilton
 Boston Scientific
 CA Technologies
 Cardinal Health
 Carolina Biological Supply
 Causecast
 Celgene
 Chevron
 Cisco

Cognizant
 Comcast
 Corning
 Dell
 Deloitte
 Discovery Communications
 Dow Chemical
 Dreamworks
 DuPont *
 Eaton
 Eastman Kodak
 Eli Lilly and Company
 E-line Media
 EMC2
 Epic Games
 ExxonMobil *
 Facebook
 Fluor
 GE
 GlaxoSmithKline
 Google
 Hitachi, Ltd
 HP
 Honeywell
 IBM

Intel *
 JP Morgan Chase
 LMI Aerospace
 Lockheed Martin
 McKinstry
 Merck
 Microsoft
 MITRE
 Motorola Solutions
 Nature Publishing Group
 The Nielsen Company
 Northrop Grumman
 OptumRx
 Oracle
 PASCO Scientific
 Procter & Gamble
 Promethean
 Qualcomm
 RAND
 Raytheon
 Rockwell Collins
 Rolls Royce
 Sally Ride Science
 Samba Energy
 Samson Energy

Schlumberger Limited
 Sempra Energy
 Siemens
 SMART Tech
 Sony Pictures
 Space Systems / Loral
 State Farm Insurance
 Stellar Solutions
 Symantec
 Synopsys
 Teradata
 Texas Instruments
 Thermo Fisher Scientific
 Time Warner Cable *
 United Launch Alliance
 Verizon
 Vernier Software & Technology
 Viacom
 Virgin Galactic
 Wireless Generation
 Xerox *

* Board Member



2012 STEMworks





{CHANGE THE
EQUATION}

4



- **STEM is Everywhere:** Players will explore the variety of STEM careers that impact their everyday lives through a hidden object game. When objects are selected, the collection of STEM professions involved in its design and production will be explained.
- **STEM Career Matchmaker:** A variety of interactive tools will be used to identify which STEM professions best match a player's interest, abilities and personality.
- **STEM Career Profiles:** Players can print out a handy career map that outlines the educational, extracurricular and professional pathways that lead to STEM careers.
- **STEM Career Quest:** Players get to make a lifetime of career, school and life choices as they explore versions of real-life professional career paths based on interviews with hundreds of STEM professionals.

{CHANGE THE
EQUATION}

5



- Live, 40-minute webcast at NASA's Jet Propulsion Laboratory
- Featuring TV and recording artist Keke Palmer and NASA's "Mohawk Guy" Bobak Ferdowsi, flight director on the Mars Curiosity Rover mission
 - Professionals from member companies GlaxoSmithKline, Rolls Royce, and Viacom
 - Students from John Muir High School in Pasadena, Calif.
- [Learning Guide](#) with lesson plan suggestions
- Extensive outreach to teachers and out-of-school youth leaders



6

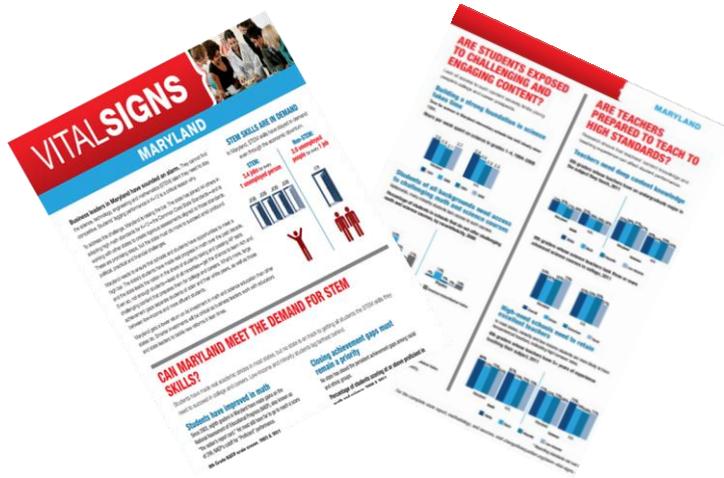
2012 Vital Signs

- 51 state specific [summaries](#) of key data indicators about STEM learning, K-12
- [Web-based data](#) that goes beyond the summaries, to include a total of nearly 50 indicators per state
 - Comparisons between states on indicators can be generated
- The [Next Frontier for STEM Data](#) that describes critical data not yet available from states
- Vital Signs briefs
 - [All Over the Map](#)
 - [STEM Help Wanted](#)
 - [Lost Opportunity](#)

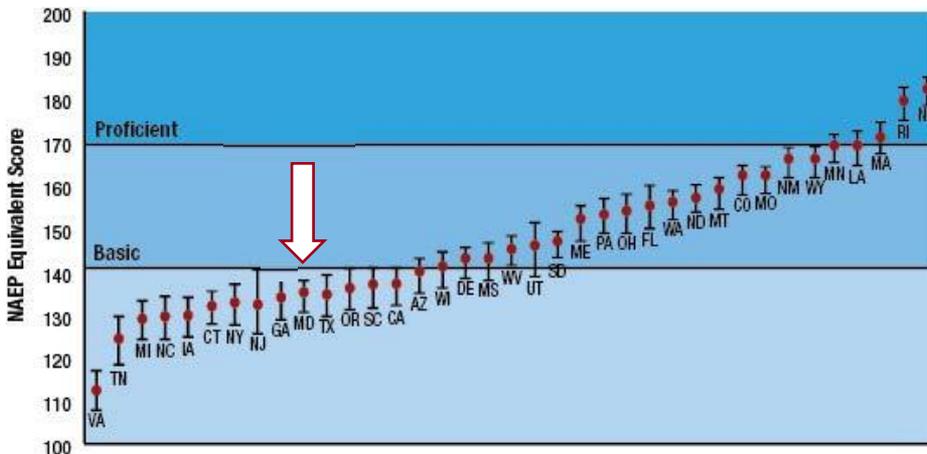


7

Vital Signs Summary—Maryland



8th Grade Passing Bar in Science



STEM Help Wanted

Jobseekers outnumbered online job postings by 3.6 people to 1 job



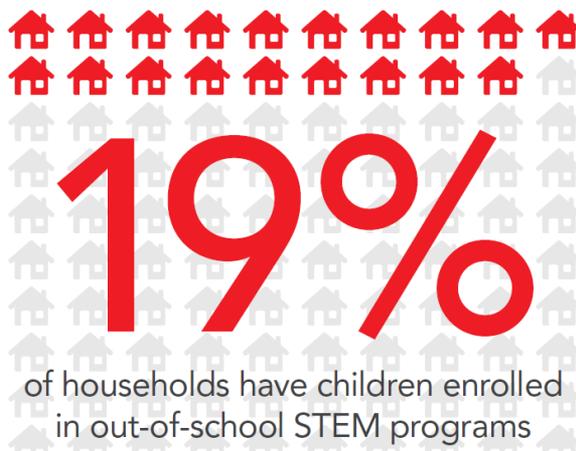
STEM jobs outnumbered unemployed people 1.9 jobs to 1 person



{CHANGE THE EQUATION}

10

Lost Opportunity



{CHANGE THE EQUATION}

11

Thought Leadership

- Leading the STEM conversation using data, research and social media
 - [STEMtisticSM](#) spotlight STEM facts and figures
 - [CTEq Now](#) e-newsletter reaches more than 9,000 each month
 - [STEM Salons](#) bring together influential leaders each month
 - [Twitter](#) has more than 6,500 followers
 - [Facebook](#) has more than 11,500 likes
 - [YouTube](#) channel has nearly 48,000 views



12

Contact Information

Linda Rosen

[**lrosen@changetheequation.org**](mailto:lrosen@changetheequation.org)

www.changetheequation.org

Facebook.com/changetheequation

Twitter.com/changeequation



13